



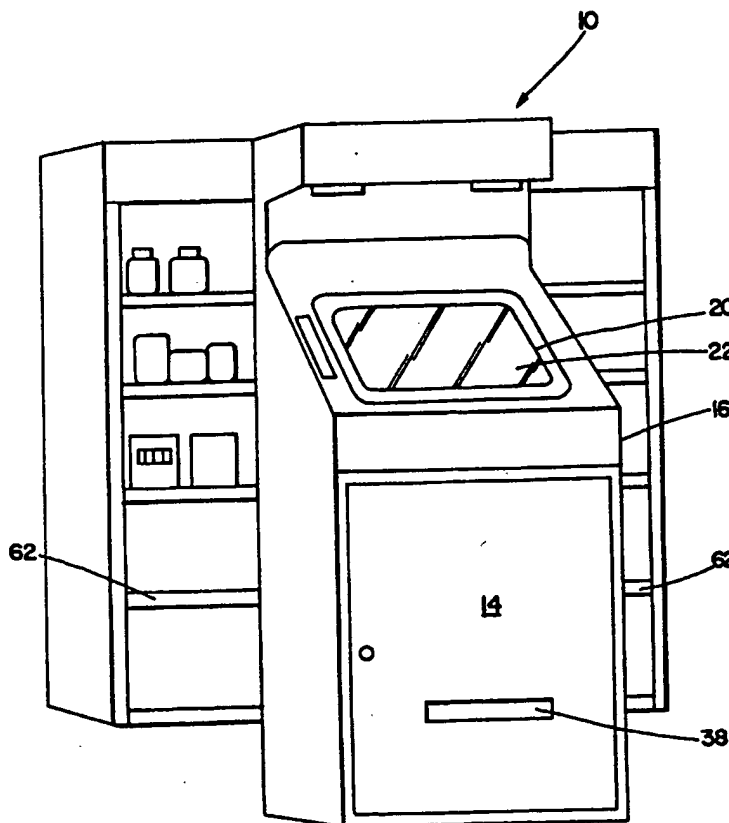
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(54) Title: KIOSK INFORMATION AND PURCHASE SYSTEM

## (57) Abstract

A kiosk system (10) for providing information to customers and for processing customer orders for items through kiosk units. A customer may place an order by selecting items from an electronic catalog located at a facility such as a pharmacy. The kiosks include a printer placement (38), monitor installation (20), a magnetic strip reader for accepting credit card or debit card transmissions, a UPC bar code scanner for scanning bar codes on product labels to automatically provide on screen information (22). Purchase orders may be transmitted to one or more distribution center computers where they are processed and filed.



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## KIOSK INFORMATION AND PURCHASE SYSTEM

### FIELD OF THE INVENTION

The field of the invention relates to kiosk apparatus and computer networks. More specifically, the present invention relates to improved kiosk apparatus that may be used for presenting product or service information, providing information on other topics, providing  
5 printed coupons and processing customer purchase orders for merchandise.

### BACKGROUND OF THE INVENTION

Many different industries and businesses can make effective use of kiosks to assist with their product or service offerings to customers. As just one example, in an effort to expand the scope of services and amenities available to their patients (i.e., customers), many  
10 health care provider facilities (e.g., clinics, retail pharmacies, hospitals, doctor's offices, etc.) have started stocking and offering to sell to their customers health care related items. By offering such information via kiosks it may not be necessary to have all such products immediately available, consuming valuable floor space. Certain businesses that have not traditionally had products on display may now have products on display via a kiosk.  
15 Training a sales staff also takes many resources. By use of a programmed kiosk, sales information can be delivered to customers without error and without having to spend valuable resources training employees about every product available. For example, many ophthalmologists have co-located at their offices eyeglass and contact lens dispensing facilities so that patients who need corrective lenses may select and purchase them  
20 immediately following their eye examinations. Many hospitals today have retail shops in the hospitals so that patients who are in need of non-prescription items that may help in their recovery may purchase them while in the hospital or upon their discharge. Specialty clinics such as sports medicine clinics may also offer for sale health care related items (e.g., heating

pads) that may assist patients in their recovery from sports-related injuries. The ability to purchase health care related items in conjunction with a visit to a health care provider facility may result in significant time-savings for patients of the facility.

Health care provider facilities, like many other businesses, are physically limited in the amount of products they can stock and display for their customers. Many specialty health care items such as canes, crutches, blood pressure monitors, etc. require a significant amount of floor space. General health care merchandise such as nutritional supplements, soaps, bandages, over-the-counter medications, etc. also consume a significant amount of floor space. A health care provider facility must consider the physical space requirements (as well as other factors such as turn-over) when deciding what merchandise to stock. Even health care provider facilities such as pharmacies or optical clinics located in larger retail department stores or hospital complexes have physical space limitations. A facility may decide to stock large quantities of a few items or small quantities of many items or use a combination of the two approaches depending on sales history, projected demand, etc., for the merchandise. Significant overhead costs may be incurred depending on which products the facility chooses to stock. Furthermore, a facility is always at risk of losing sales of customers who request an item that is not in stock and that cannot be obtained quickly and easily.

A customer who needs a specialty health care item—for example, lightweight metal crutches—that pharmacies, for example, generally choose not to stock, may be inconvenienced in several ways. First, the customer may be inconvenienced simply because she cannot find the crutches she needs and may instead be forced to use an inferior substitute. Second, considerable time may be spent trying to find a pharmacy that has the crutches in stock. If the pharmacy that has the item is far away from the customer,

significant time, expense, and effort may be required to get the item to the customer or for the customer to get the item from the pharmacy. If the crutches are simply unavailable locally, a special order may need to be placed for shipment directly from the manufacturer and considerable time may be spent waiting for the order to be placed and for the crutches to  
5 arrive.

Another need in health care provider/supplier locations is for quick, effective, accurate information about a medical product or about a medical condition. Frequently, medical professionals do not have the time to answer all of a patient's medical questions. It may also be the case that a patient does not desire to ask a doctor or nurse a particular  
10 medical question out of fear or embarrassment perhaps. Furthermore, it is frequently the case that questions do not come to a patient's mind until after leaving the doctor's office.

There is also a need for a system that allows a customer to arrange to order products. There is also a need for an apparatus that can answer customer questions and provide helpful product information. There is a need for such an apparatus to be relatively small so  
15 it does not take up much store or office space.

### SUMMARY OF THE INVENTION

The present invention is an improved kiosk unit which may serve several program purposes; for example, allow patient's to place a customer purchase order, learn about particular information, and learn about products. In a preferred embodiment of the present  
20 invention, a customer order is placed through a computerized kiosk unit located in, for example, a health care provider facility such as a pharmacy, a hospital, a specialty clinic, doctor's office, etc. The kiosk contains a touchscreen with which the customer interacts to peruse information in a database, such as an electronic catalog of products from a variety of vendors. The customer may order any of the items presented on the screen and may order

more than one item. The customer may also place a "subscription" order so that the selected item is re-ordered at a regular interval (e.g., weekly, monthly, bi-monthly, etc.) After the customer has selected all of the items that he or she would like to order, the customer provides an acknowledgment (e.g., by selecting an "order" button). A receipt summarizing the order and with an order number may be then printed for the customer at the kiosk.

Following the customer's acknowledgment, the order is sent to or retrieved by a computer-based order management system located at the kiosk computer, at a remote computer located at the facility, or at a remote computer outside the facility. The customer then arranges to pay for the ordered items (e.g., with cash or by credit card.) A cashier or another employee of the facility accesses the order using the order number on the receipt (or alternatively, the customer's name, an account number, etc.) and processes the customer's payment. The customer may also request that the ordered items be delivered to the customer's home rather than the facility. The customer's order is then stored at the order management system for processing at a later time, possibly in conjunction with the facility's regular purchase orders. A retail pharmacy may stock an extensive array of pharmaceuticals and a few types of home health care items. In contrast to customer purchase orders in which small quantities of items are requested, the quantities of items that the health care provider facility requests in its regular purchase orders may be very large.

In a preferred embodiment of the present invention, the customer purchase orders that are stored at the facility's order management system are processed on a daily basis. The purchase orders may be sent next to an order routing computer. The order routing computer may be equipped with routing information (e.g., a look-up table) for computers located at distribution centers throughout the country. In addition to receiving customer purchase order information, the order routing computer may receive information (such as an

identifier) regarding the facility from which the customer purchase orders are sent. The order routing computer then uses the information to locate a distribution center computer to which the customer and/or regular purchase orders may be routed and then filled. The distribution center to which the orders are routed warehouses the products a customer may  
5 order as well as the other items that the facility orders on a regular basis. The orders may then be processed through the distribution center computer. Products for customer orders may be sent to the facility through which they were ordered or if requested, they may be sent to the customer's home.

In a unique embodiment of the present invention, the kiosk computer modem or a  
10 central server computer in communication with the kiosk(s) located at a health care provider facility, for example, (or electronically connected thereto from a remote site), dials out automatically via a non-dedicated phone line to a wholesaler or distributor, on a periodic basis, to place customer purchase orders.

Customers may also peruse an electronic catalog or other software based information  
15 program in the kiosk unit and learn as much about the items as they would if the items were actually in the facility. The kiosk unit may also contain information to assist in answering customer questions about relevant topics of interest. By touching identified areas on the touchscreen of the kiosk unit, a customer can find information about a wide variety of products, services, and/or other relevant information.

20 The apparatus of the kiosk unit of the present invention has many improvements over known kiosks. The video monitor is preferably mounted at an angle between horizontal and vertical (preferably about thirty degrees above horizontal) to facilitate ease of viewing and use of the touchscreen by customers. The monitor is preferably removable and replaceable. The monitor may be mounted on a plate that is secured to a ledge in the unit by

conventional threaded fasteners. When a monitor malfunctions, the entire plate is readily removed by removing the fasteners and replacing the monitor/plate with another monitor/plate. The body of the kiosk is preferably made of welded sheet metal construction with adjoining shelf units mounted thereto. These shelves may be used to place particular products thereon for display to customers. In a preferred embodiment, the paper printer is housed just beneath the monitor in a configuration that enables the printed information that a customer may request via touchscreen commands to be provided at the front of the kiosk unit in an easy to see location. The printer is preferably placed on a sliding shelf for ease of repair and paper replacement. The paper shelf slides into and out of the body of the apparatus by an operator simply gently shoving the shelf in or pulling it out. A keyboard and processor may be stored in the bottom of the body of the apparatus in a cabinet formed by the sheet metal structure. The unit may also be configured to include a magnetic stripe reader for accepting credit card or debit card payment for purchases. Magnetic stripe readers are advantageous in a number of other ways, such as reading a customer ID card having a magnetic stripe containing information about the customer (e.g., name, address, phone number, etc.).

In yet another embodiment of the present invention, multiple kiosk units may be electronically connected to a central server computer. In this manner, each unit would not necessarily require its own data storage since the main or central computer could provide this function to each kiosk remotely.

Customers benefit from the quick and efficient location and delivery of the items and information they need. Businesses benefit from the ability to offer a larger selection of items via the kiosk without actually stocking them. Other benefits include quick, accurate



answers to customer questions on particular topics, and electronic purchase orders automatically generated and sent to a supplier.

While a preferred embodiment of the present invention is described herein in relation to the medical care industry, the present invention is useful in practically all industries where goods and/or services are sold and/or where particular information is needed by a customer. These benefits and other advantages may be understood in relation to the following drawings and description.

### BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is perspective view of a kiosk structure of a preferred embodiment of the present invention;

Figure 2 is a front elevation view of the kiosk of Figure 1 with the front panel removed;

Figure 3 is a side view of the printer for use in the present invention;

Figure 4 is a schematic diagram of a plurality of kiosks in communication with a remote server computer;

Figure 5 is a screen shot of a customer order selection form for a preferred embodiment of the present invention;

Figure 6 is a screen shot of a customer order form for a preferred embodiment of the present invention;

Figure 7 is a screen shot of a customer information entry form for a preferred embodiment of the present invention; and

Figure 8 is a block diagram of a preferred embodiment of the kiosk of the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT(S)

Referring to Figure 1, a preferred embodiment of the present invention is shown generally at 10. An electronic catalog of products and information from one or more vendors may be made available through a kiosk 10 located in a customer facility. Instead of an electronic software catalog, the present invention may incorporate other software based programs about products and other relevant topics. A wide variety of industries and businesses may make effective use of the present invention. As just one example, health care provider facilities provide health related services to patients (i.e., customers) and may include retail pharmacies, hospital pharmacies or shops, extended care facilities, doctor's offices, specialty clinics such as sports medicine clinics, cancer clinics, ophthalmology clinics, acute care or emergency clinics, obstetrics and gynecology clinics, occupational and physical therapy clinics, sleep clinics, etc. Preferably, a computer in the kiosk contains the electronic catalog and a touchscreen interface/graphical user interface is available to peruse the items in the catalog. The items in the electronic catalog may be stored in a database at the kiosk computer—for example, on a hard disk, a floppy disk, or a CD. Preferably, the kiosk computer is equipped with a printer so a user may print information leaflets, obtain coupons for products or services, or obtain a receipt for ordered items and facility personnel may print reports regarding system usage, etc. Finally, the kiosk computer may be equipped with a network adapter (or card) and cable (or connector) or alternatively, a modem, so it may communicate with other computers in the system of the present invention.

Referring to Figure 2, the kiosk 10 is shown with the front panel 14 open. The front panel 14 is preferably hinged or otherwise secured to the structure 16. The front panel 14 and structure 16 may be constructed of 16 gauge metal panels, welded together and painted, or in another embodiment the same components may be made from plastic or a combination

of metal and plastic construction. The front panel 14 conceals most of the components of the present invention, within the structure 16. A monitor 20 is preferably secured to a metal plate 21. The plate 21 is preferably fastened to a ledge 19 within the structure 16. In this manner, the monitor 20 is readily removable from the structure for ease of replacement and repair. The monitor 20 is preferably a CRT monitor that may be purchased from Magnavox or any of a number of other monitor manufacturers. A touchscreen 22 is secured to the face of the monitor by fasteners or other suitable means (for example, velcro strips around the perimeter of the monitor and touchscreen). In a preferred embodiment of the present invention touchscreen model E284A-141 made by Elo Touch Systems in Fremont, California, was used. A fully functional keyboard 24 may also be provided with the unit 10, and stored in a compartment 26 below the monitor 20 and behind the front panel 14. Any conventional personal computer keyboard may be used with associated hardware.

The kiosk 10 also preferably includes a CD Rom drive 28, a diskette drive 30, a processor 32, a modem 33, a sound card 35, microphone 37 and hard drive 31. The processor preferred at the present time is a Pentium® 133. Several commonly available CD drives, diskette drives, modems, microphones, hard drives and sound cards are readily available from many sources. Audio speakers 34 may be included in the kiosk 10. In a preferred embodiment the speakers were 3 inch, 25 ohm, 1 watt speakers readily available from several commercial sources.

A printer mechanism 36 resides within the structure 16 to provide a user with printed information, coupons, receipts, etc. A printer mechanism was purchased from Telpar in Houston, Texas, model number SP2021 (with paper roll and cutter). The print head, controller board, power supply, and rolled paper feed fit within the structure 16 preferably on a shelf inside the structure and provide a printed paper access 38 at the front of the kiosk.

A UPC reader or scanner 50 may be provided with the present invention. Ideally the scanner 50 should reside on the structure 16 somewhere in close proximity to the monitor 20. Products 60 on shelf units 62 mounted to one or more sides of the structure 16, may be removed from the shelf unit 62 and scanned with the scanner 50. UPC bar codes are  
5 routinely provided by manufacturers on their product packaging. Once the UPC scanner 50 scans a product bar code 61 product information may be displayed on the monitor 20. The scanner 50 is electronically connected to the processor 32 which controls the display on the monitor 20. In addition to product bar codes, customers may be given a card having a bar code thereon to be scanned by the scanner 50 to identify the customer electronically and  
10 record customer activity at the kiosk 10 (e.g., product purchases, health tips, insurance information, health statistics, as well as other information that would benefit a customer in interacting with the kiosk 10). Bar code developed information may be displayed at the monitor 20 through a Windows® interface such as Windows 3.11. In a preferred embodiment a UPC scanner model MS951 from Metrologic in Blackwood, New Jersey was  
15 used. The UPC scanner 50 is adapted to connect with the processor, such as a keyboard emulator.

A magnetic stripe reader 70 may also be provided with the structure 16 and is preferably mounted near the monitor 20. The magnetic stripe reader 70 may be used to read the magnetic stripes on credit cards, debit cards, or ID cards for example. In a preferred  
20 embodiment of the present invention magnetic stripe reader model MR4 was provided by Logic Controls. With the provision of a magnetic stripe reader 70, products may be purchased at the kiosk 10 and paid for at the kiosk 10. In this manner, the printer 36 may be adapted to provide a printed paper receipt to a customer upon payment for products

purchased. The magnetic stripe reader 70 may be electronically connected to the processor 32 in much the same manner as stated above with respect to the UPC scanner 50.

The printer 36 is preferably placed on a sliding shelf 39 which enables the printer to be removed from the structure 16 for repair or for replacing a paper roll (which may weigh  
5 in excess of 20 pounds). At the front of the printer 36, at the paper output path, platypus lips 41 and a metal spring biased tongue 43 may be installed to help prevent paper jams while allowing for ease of printed paper collection by a user.

Referring now to Figure 7, there is shown just one schematic representation of a system implementation of a plurality of kiosks of the present invention. In this manner,  
10 many kiosks 10 may be connected to a remote computer processor 68 through any one of several well known communication systems. For example, the remote computer 68 may be in electronic communication with the kiosks 10 via a local area network. The remote computer 68 may also be in communication with the kiosks 10 through a wide area network 70 or through the public telephone switched network, or through the internet or an intranet.  
15 In this manner, the kiosks 10 may be controlled to a greater or lesser extent by the remote computer 68. For example, program changes to the kiosks 10 may be made at the remote computer 68 and electronically delivered to each kiosk. This arrangement would save much programming time over the alternative of having to reprogram each kiosk in a facility or facilities that may have dozens or more kiosks 10. In another example, a live speaker at the  
20 remote computer site may broadcast a speech or conduct a question/answer session with interested customers at the kiosks 10. The communication link between the kiosk and the remote computer 68 may be a two way (audio/video) link with respect to both the remote computer user and the kiosk, or it may be a two way link from the remote computer and a one way link from the kiosk users or simply an audio/video link from the remote computer

to each kiosk without each kiosk having any communication capability back to the remote computer. TCP/IP protocol may be used in conjunction with standard telephone lines and commercially available modems for implementing communication between the remote computer 68 and the kiosks 10. The remote computer 68 may be merely remote in the sense  
5 that it is a few feet away from the kiosks 10 (such as is the case with a local area network) or the remote computer 68 may be several thousand miles away (such as is the case with a wide area network).

The remote computer 68 may collect various information from each kiosk 10. For example, customer interaction data may be collected which shows popular and unpopular  
10 portions of the programs available at the kiosk 10 by tracking the number of times each program is accessed by a user. This type of information provides product manufacturers valuable information regarding the effects there programs or advertisements are having on consumers. The remote computer 68 may also collect information concerning the number and type of coupons issued by each kiosk 10. Also, the remote computer 68 may collect  
15 survey results taken at each kiosk 10. The kiosks 10 may receive data from the remote computer 68. For example, the kiosks 10 may receive program content changes, program control step changes, program bug fixes, as well as new material, new coupons, etc.

Each kiosk 10 is preferably electronically identified by a unique identification number. Each time the remote computer 68 queries each kiosk, it receives the kiosk  
20 identification number. From this information the remote computer 68 knows the most recent communication received from that kiosk and by checking a database of prior collected information from that kiosk, the remote computer 68 determines new information at the kiosk memory that has not yet been collected. In much the same manner, the remote computer 68 recalls what information the remote computer has previously sent to each

respective kiosk and thus, only provides that information to each kiosk which it has not received prior.

Graphical and/or video programs may be run at the kiosk 10 through, for example, a programmed compact disc running at the CD drive 28. Text programs to be run at the kiosk 10 may be programmed and stored at the hard drive 31, for example, or at the diskette drive 30.

Figures 8-10 show example screen shots at a kiosk 10. The present invention may also be used to place product orders. Following a customer acknowledgment, customer orders may be processed through an order management system. An order management system may be co-located at the kiosk computer, at a remote computer located at the facility, or at a remote computer located outside the facility such as at a distribution center. In an alternative embodiment of the present invention, the order management system may be co-located with the electronic catalog interface program so that the local area network connection is not needed. In this embodiment of the present invention, the kiosk computer may be equipped with a modem so customer orders may be transmitted directly to a distribution center computer.

In a preferred embodiment of the present invention, several application programs that are operative in the Microsoft® Windows environment execute on the kiosk computer to provide the features and functionality of the present invention. The kiosk computer may thus be an IBM or IBM-compatible personal computer. The present invention, however, is not limited to any particular computer or windowing system and may be embodied on a variety of platforms including Apple Computer Macintosh, UNIX, etc. Both end-user (e.g., clinic or pharmacy customer) and system maintenance application programs may reside on the kiosk computer. The application programs may include an electronic catalog interface

program (for an end-user to interact with the electronic catalog), a touchscreen calibration program for maintaining the touchscreen, a report generation program for printing system usage reports, a leaflet header modification program for changing the message that appears on the headers of information leaflets that may be printed at the kiosk, and a setup/view  
5 swapfile program for maintaining a file that contains customer order information. In addition, an order management system may be resident on the kiosk computer.

Preferably, the application program that executes on the order management system computer is operative in the Microsoft® Windows environment or the DOS environment. The order management system may thus be implemented on an IBM or IBM-compatible  
10 personal computer. The order management system preferably, contains a primary set of features such as providing for retrieval of orders from a kiosk computer, review, and editing of purchase orders as well as entry of customer information such as name, address, and insurance or payment plan information.

Preferably, the order management system has a database containing product and  
15 pricing information for items. Purchase orders may then be generated from items in the database by entering item identifiers and quantities in fields on an order entry form. Preferably, a purchase history is kept that may assist the facility in future purchasing decisions. For example, the system may calculate an average weekly usage (AWU) for a particular item so the facility may order a quantity consistent with the AWU. The system  
20 may also review the purchase history and suggest a quantity to be ordered.

Customer orders may be transferred from the kiosk computer to the order management system in several ways. If the electronic catalog application and order management system application are resident on the same computer, a single, resident file



may be used to transfer information (e.g., customer order information) between the applications.

In another embodiment of the present invention, customer orders may be transferred from the kiosk computer to a remote order management system computer using peer-to-peer  
5 networking/file sharing capabilities supported by the Microsoft® Windows environment. In this embodiment, customers orders are stored in an ASCII file format on the hard disk of the kiosk computer.

In addition to reviewing the items on a customer order, a facility employee accessing the customer orders may enter additional information about the customer. Alternatively, a  
10 customer may enter this information while at the kiosk computer. Preferably, this information is entered by a facility employee as it may be difficult and time-consuming for a health care facility customer to enter the information using a touchscreen interface to a keyboard. The information may be entered quickly by a facility employee using a keyboard in communication with the order management system.

15 To order one or more items, a customer interacts with an electronic catalog via a touchscreen interface to a kiosk computer located at a facility. Preferably, the electronic catalog contains the same information as may be found in a paper catalog and is arranged similarly. Preferably, the catalog contains items from a large number of vendors thereby giving customers more options with respect to a particular product.

20 Preferably, the electronic catalog is comprised of hierarchical menus from which the user makes selections. A user interacts with the touchscreen interface to the electronic catalog by touching buttons (i.e., icons) that represent various available options. In a preferred embodiment of the present invention, the first screen of the electronic catalog presents introductory information and a "table of contents" button to a user. After selecting

the table of contents button, a list of categories or items that may be of interest to the user is presented. Examples of top-level categories include "Medication Guide" or "Diseases & Illnesses." Instructions on the screen may ask the user to "Touch a category of interest." Selection of a top-level category may result in the presentation of additional category  
5 buttons from which the user may choose. Alternatively, a user may enter selection criteria such as a partial description of an item (e.g., the words "metal crutches") and select a "Touch to Find" button. The electronic catalog then searches for items meeting the search criteria and displays the results to the user.

As the user makes selections through the menu hierarchy, the categories may be  
10 more specific or detailed. In addition, the user may be prompted to respond to specific queries to locate items. Categories from which the user may choose are presented until product or specific item information that meets the user's selection criteria may be presented. Within a category, several pages of items belonging to the general category may be presented. The user may navigate through the pages of items by selecting "Go Back" and  
15 "Next Product Page" buttons that may appear on each screen. Several items may appear on each catalog page. Items within a specific product category, preferably, have an identifier (e.g., in words,) and a graphic (i.e., picture). A large graphic of the item as well as a detailed description of the item may be displayed. User options may include ordering the product ("Order Product"), reviewing other products ("Previous Product"), or returning to  
20 another part of the catalog ("Go Back" or "Table of Contents").

Following presentation of item information to the user, the user may be prompted to order an item appearing on the screen or navigate to a different page or category. The user's response is read next. The user may either order the requested item (e.g., by selecting an "Order Product" icon) or continue perusing the pages of item information. If the user

chooses not to order an item, the user may continue perusing items or review additional product categories.

If the customer decides to order an item, the customer may be prompted for additional information to complete the order. For example, the customer may be asked to provide a quantity for the order. A quantity, description, and price for each item may be displayed. Preferably, the user may select any of the items listed on the page to remove it from the order or to change the quantity for the item. Following review of the items and completion of the order, the user may submit or acknowledge the order by selecting the "Submit Order" icon.

10 After the customer order has been transmitted to or otherwise retrieved by the order management system, the customer may make arrangements to pay for the ordered item(s). The pharmacist or cashier may first access the order and review it with the customer and then accept the customer's payment (e.g., cash or credit card.)

15 Finally, referring to Figure 8, there is shown a block diagram of a preferred embodiment of the kiosk of the present invention.

As can be seen from the above detailed description, the present invention has many benefits and advantages over the prior art. While it has been described primarily in one embodiment related to the health care industry, it is to be understood that the invention has great applicability in practically all industries.

## WHAT IS CLAIMED IS:

1. A kiosk apparatus, comprising:
  - a structure for housing components;
  - at least one shelf unit secured to a portion of said structure;
  - a touchscreen monitor secured within an opening of said structure;
  - a computer processor concealed within said structure and in electronic communication with said monitor; and
  - a printer substantially concealed within said structure, and adapted for providing printed paper at a printed paper access in said structure, said printer in electronic communication with said processor.
2. The kiosk apparatus of claim 1, further comprising: a UPC bar code scanner secured to said structure and in electronic communication with said processor.
3. The kiosk apparatus of claim 1, further comprising: a magnetic stripe reader secured to said structure and in electronic communication with said processor.
4. The kiosk apparatus of claim 1, further comprising a compact disc drive in electronic communication with said processor.
5. The kiosk apparatus of claim 1, further comprising a hard drive in electronic communication with said processor.
6. The kiosk apparatus of claim 1, further comprising at least one audio speaker in electronic communication with said processor.
7. The kiosk apparatus of claim 1, further comprising a keyboard in electronic communication with said processor, said keyboard stored and concealed in a compartment beneath said monitor and within said structure.
8. A communication system, comprising:

a plurality of kiosks;  
a remote server computer in electronic communication with said plurality of kiosks;  
a communication medium between said server computer and said plurality of kiosks;  
and  
each of said plurality of kiosks adapted to receive information from said server computer and adapted to send information to said server computer.

9. The system of claim 8, wherein said communication medium is a wide area network.
10. The system of claim 8, wherein said communication medium is a local area network.
11. The system of claim 8, wherein said communication medium is the internet.
12. The system of claim 8, wherein the plurality of kiosks send information to the server computer over the public telephone switched network.
13. The system of claim 8, wherein the plurality of kiosks send information to the server computer using TCP/IP protocol.
14. The system of claim 8, wherein said plurality of kiosks are adapted to receive a live broadcast originating from said remote server computer.
15. The system of claim 8, wherein said server computer is adapted to send a program change to each of said plurality of kiosks and said plurality of kiosks are adapted to receive said program change and thereby change the available kiosk presentation to the customer in some manner.
16. The system of claim 15, wherein said program change is a change to terms of a product coupon available through said kiosks.
17. A kiosk apparatus, comprising:
  - a metal structure for housing components of said kiosk;
  - at least one shelf unit attached to said structure;

a touchscreen monitor accessible at said structure;

a processor in electronic communication with said monitor, said processor housed within said structure;

a keyboard in electronic communication with said processor and housed within said structure;

a magnetic stripe reader in electronic communication with said processor, said magnetic stripe reader secured to said structure;

a UPC bar code scanner in electronic communication with said processor and secured to said structure;

at least one speaker in electronic communication with said processor and secured to said structure; and

a removable front access panel removably secured to said structure, said access panel forming one side of a component compartment within said structure.

18. A communication system in association with a plurality of health care provider facilities, comprising:

a plurality of kiosks located at said health care provider facilities;

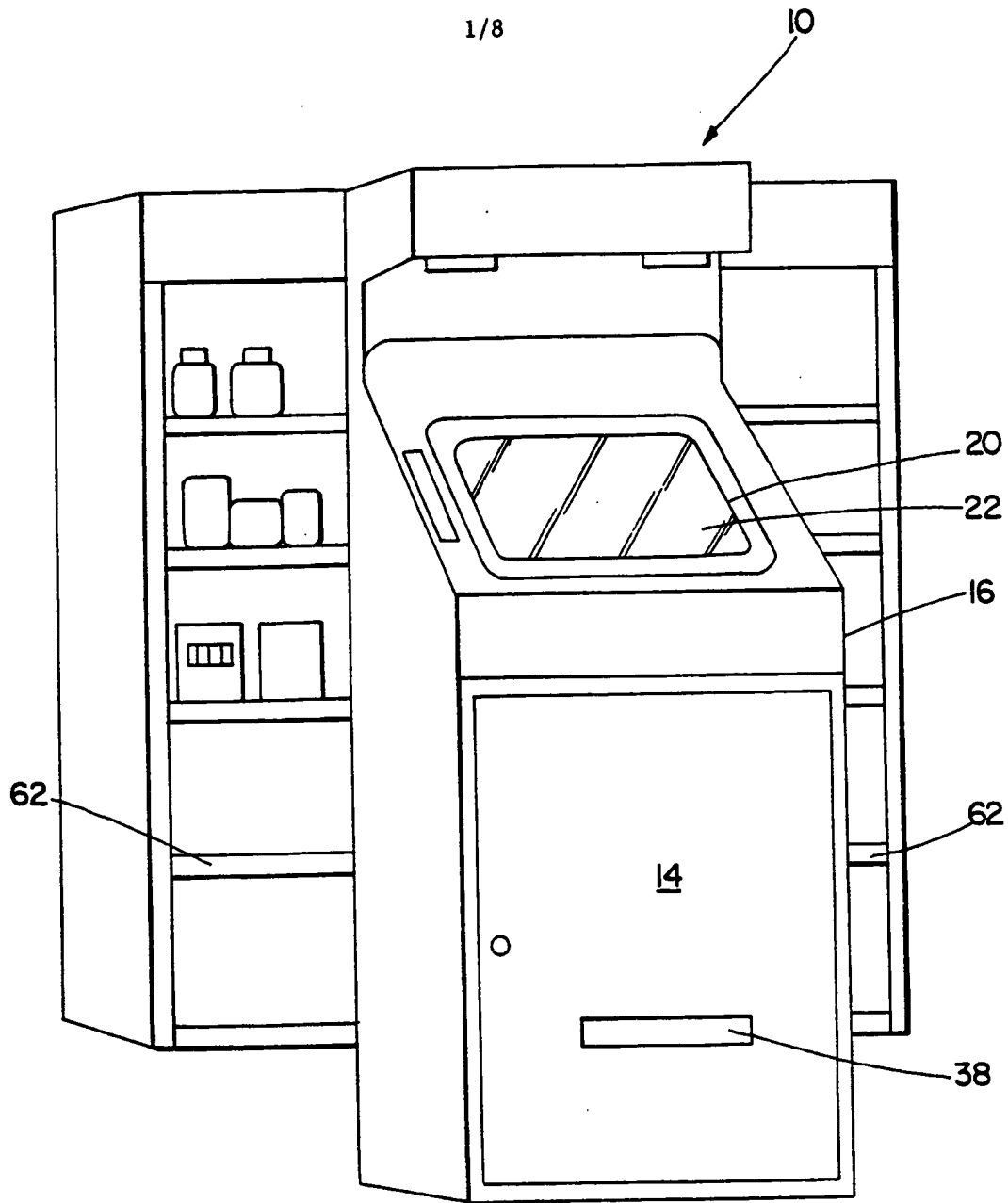
shelves attached to said kiosks, said shelves adapted for holding health care products for sale at said kiosk;

a remote server computer in electronic communication with said plurality of kiosks;

a communication medium between said server computer and said plurality of kiosks;

each of said plurality of kiosks adapted to receive information from said server computer and adapted to send information to said server computer; and

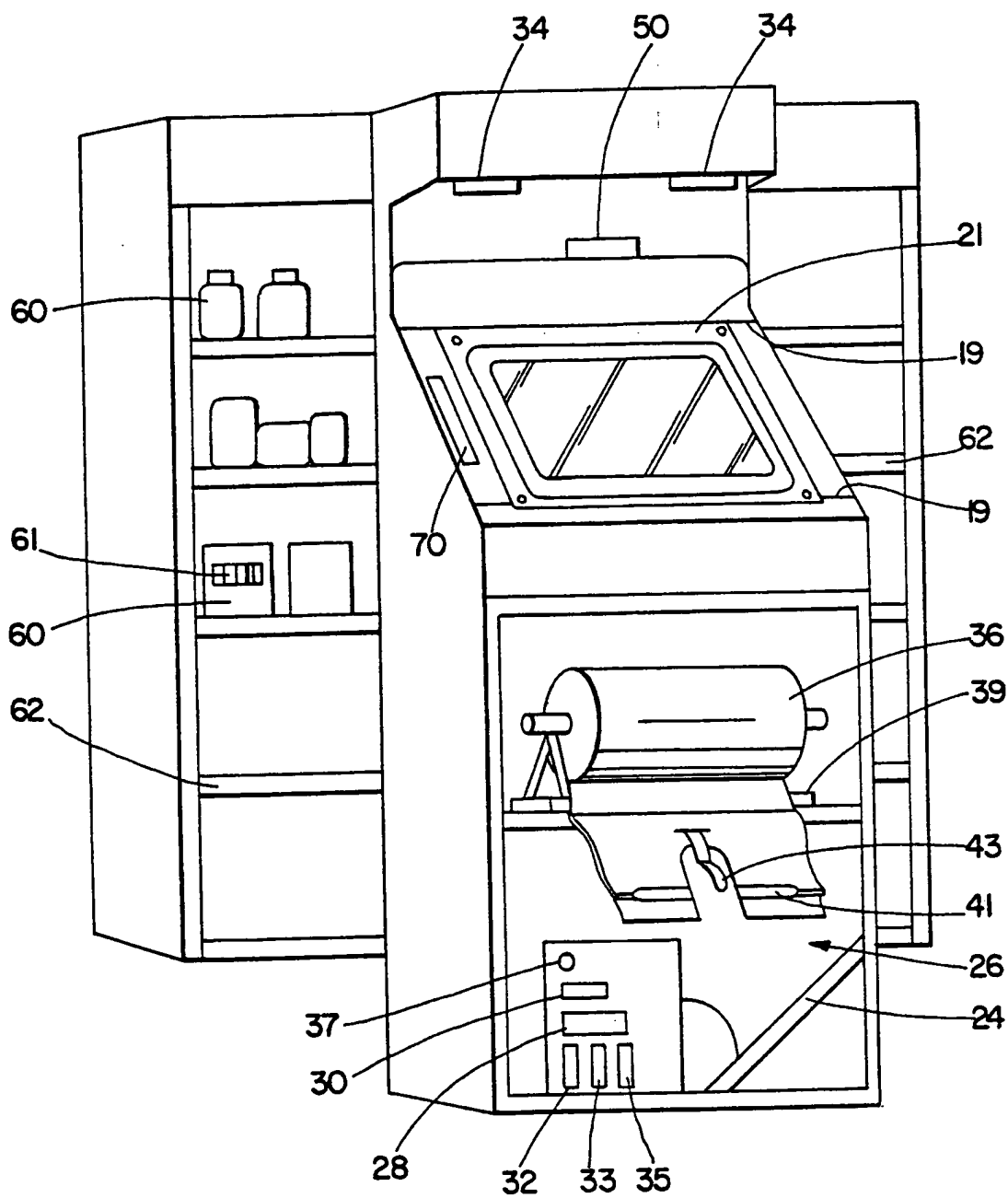
a UPC bar code scanner in association with each of said plurality of kiosks, such that products may be purchased at said kiosks via said UPC bar code scanner gathering information about a product from scanning a bar code label on said product.

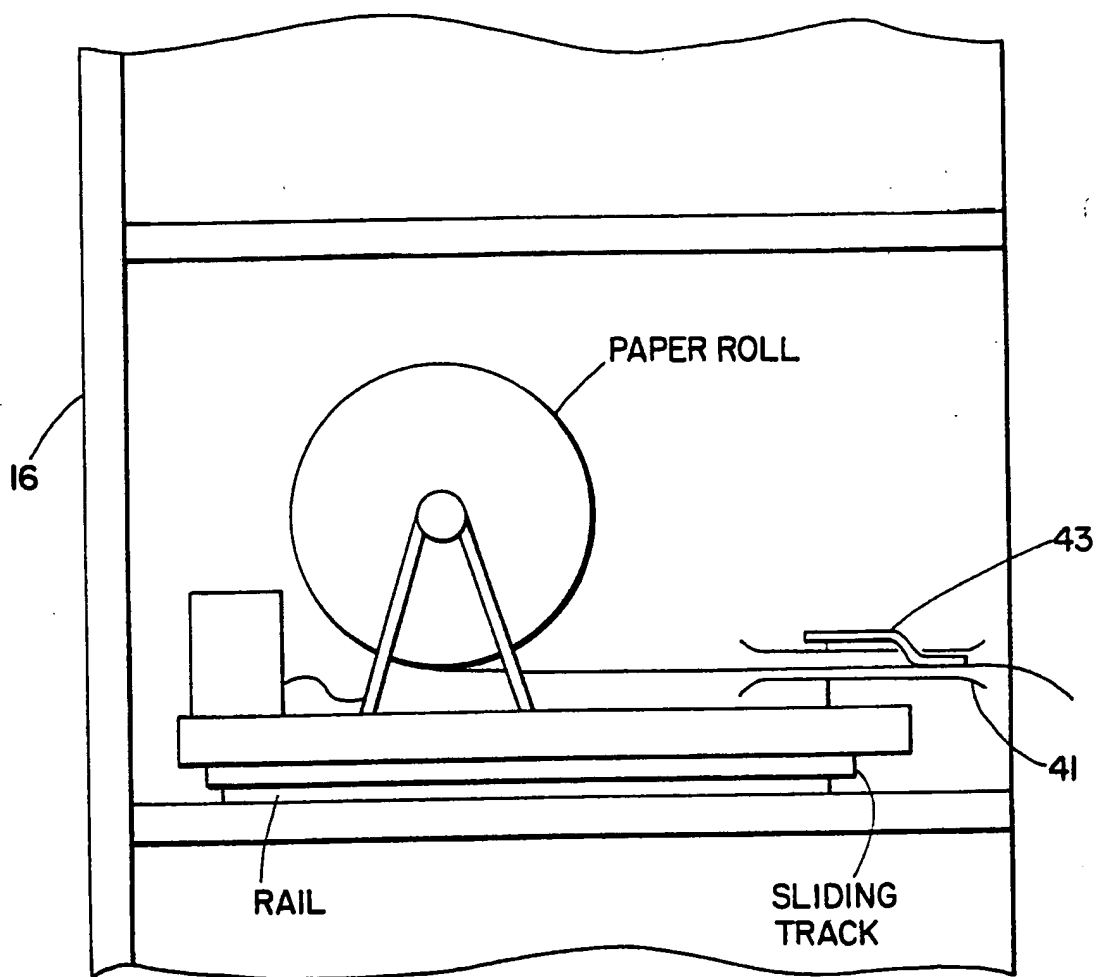


*Fig. 1*



2/8

*Fig. 2*

*Fig. 3*

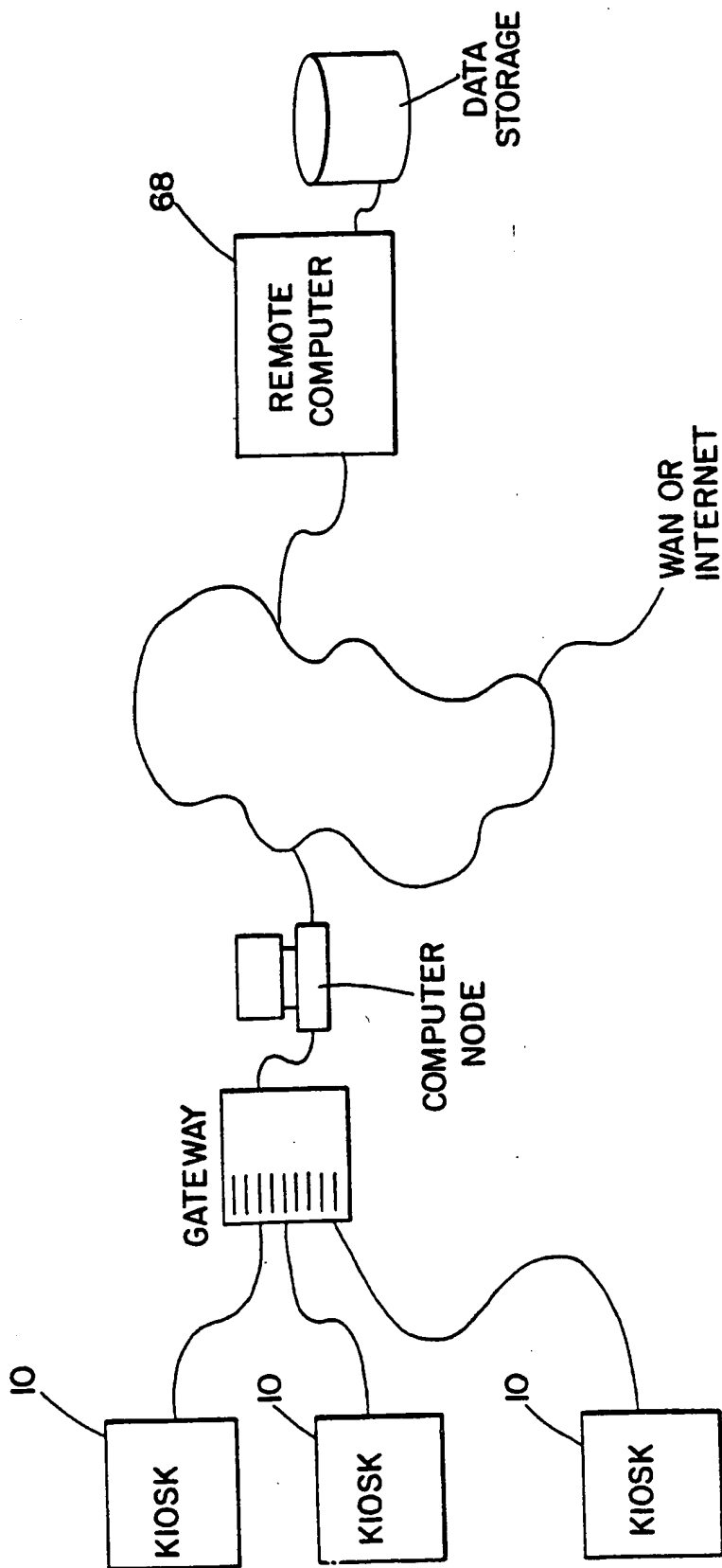


Fig. 4

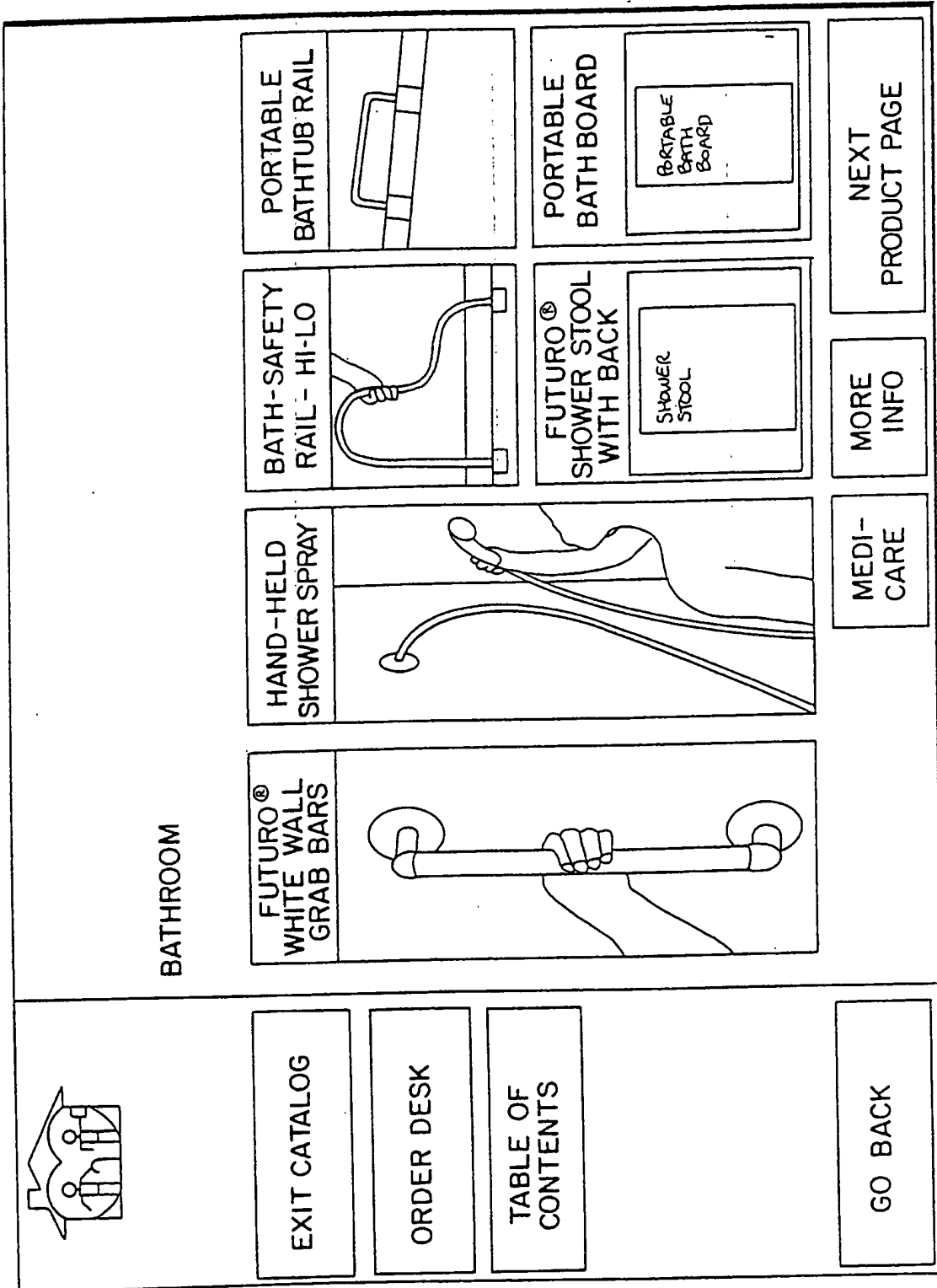


Fig. 5

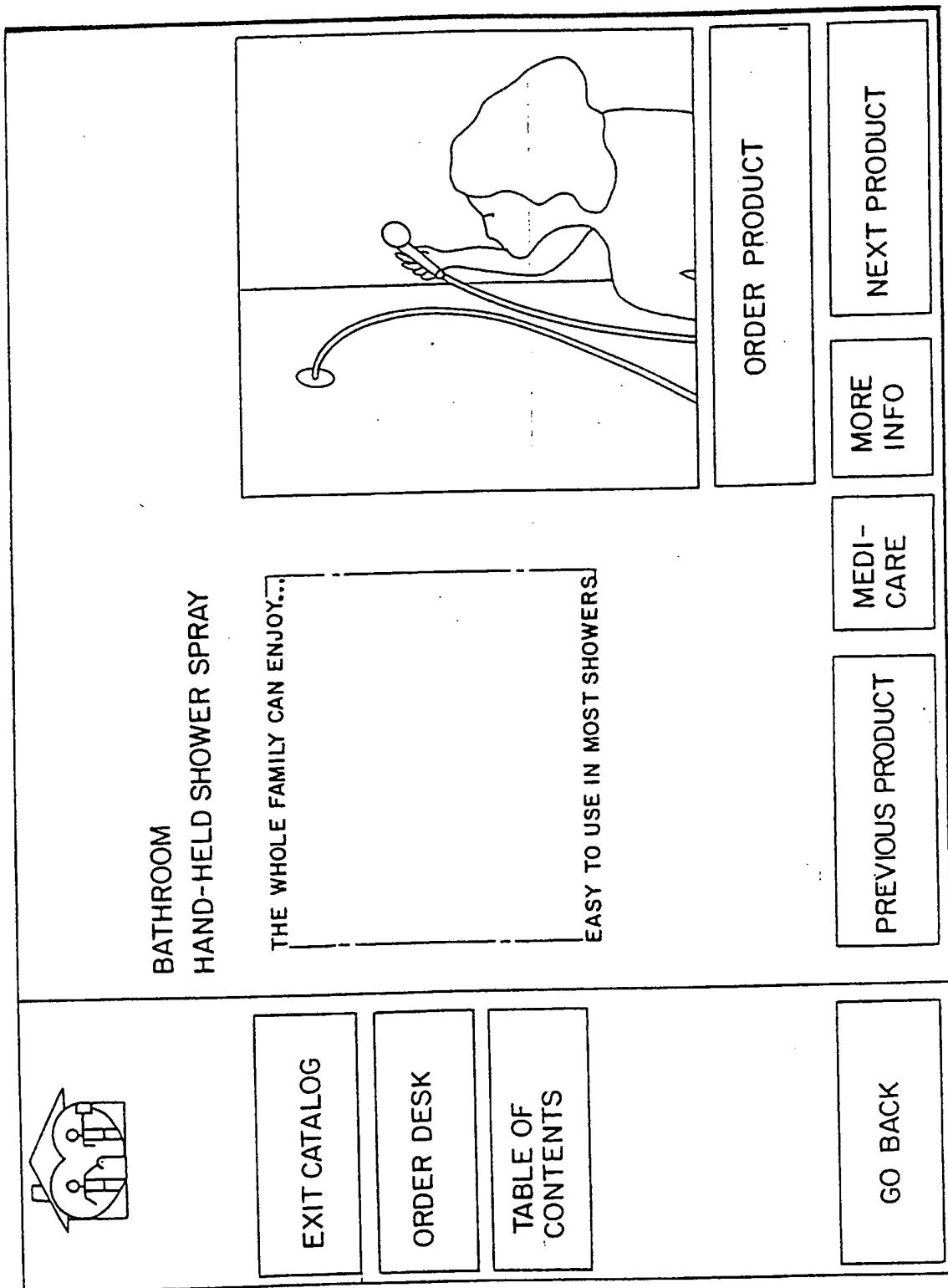
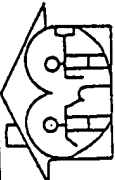


Fig. 6



EXIT CATALOG

ORDER DESK

TABLE OF CONTENTS

GO BACK

TABLE OF CONTENTS  
TOUCH AN ITEM TO SELECT IT

| QUAN-<br>TITY | PRODUCT                       | S* MD** | UNIT<br>PRICE | PRICE    |
|---------------|-------------------------------|---------|---------------|----------|
| 3             | HAND-HELD SHOWER SPRAY        | NO      | 28.79         | \$ 86.37 |
| 1             | BATH SAFETY RAIL, HI-LO       | NO      | 70.79         | \$ 70.79 |
| 1             | FUTURO SHOWER STOOL WITH BACK | NO      | 38.89         | \$ 39.89 |

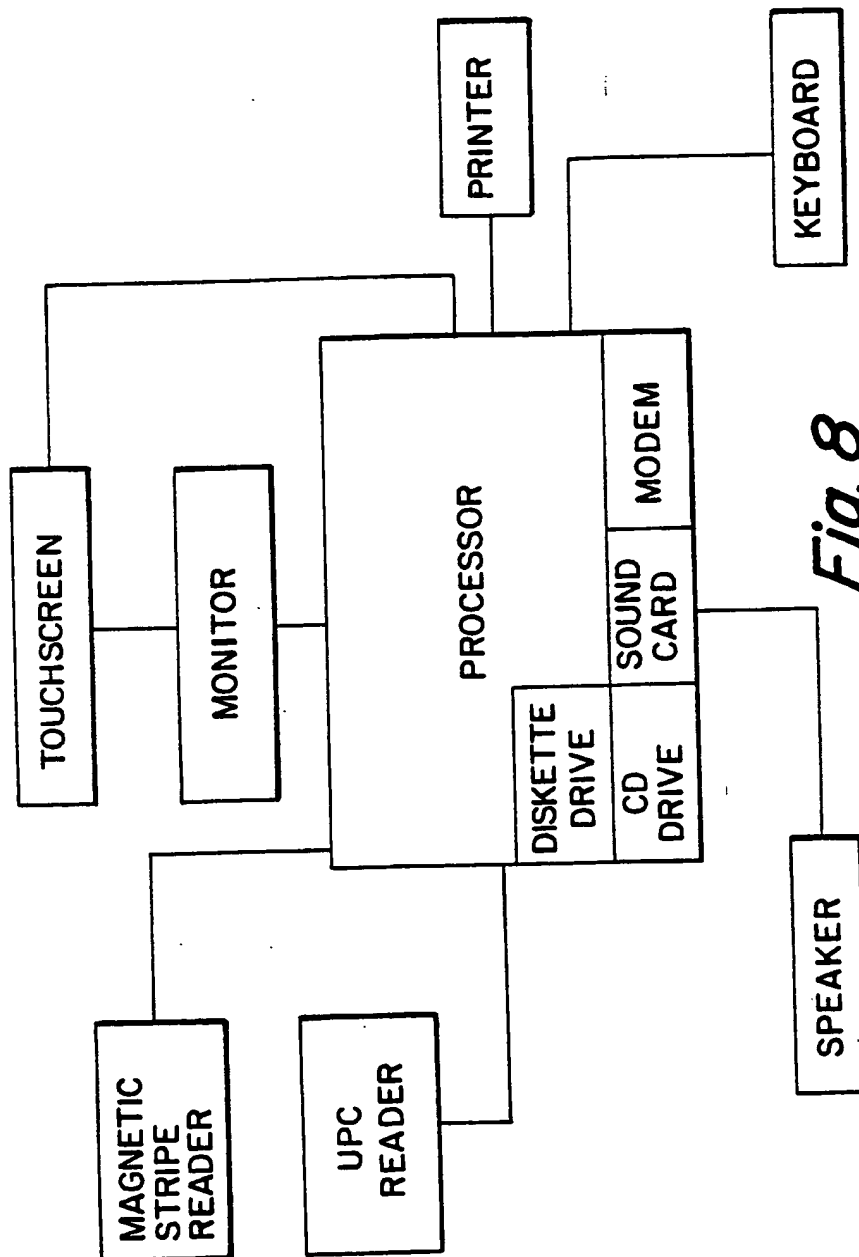
S\* - SUBSCRIPTION MD\*\* - MEDICARE ITEM

TOTAL PRICE \$197.05

REMOVE  
SELECTED ITEM

SUBMIT ORDER

Fig. 7



*Fig. 8*

# INTERNATIONAL SEARCH REPORT

International Application No.  
PCT/US98/12364

| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br>IPC(6) : G06K 15/00<br>US CL : 235/383, 380, 379, 381, 385, 462, 472; 902/27, 30, 32, 35<br>According to International Patent Classification (IPC) or to both national classification and IPC  |  |  |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
|--|--|--|--|---|---|--|---|--|--|---|--|---|---|---|--|--|--|--|--|--|
| <b>B. FIELDS SEARCHED</b><br>Minimum documentation searched (classification system followed by classification symbols)<br>U.S. : 235/383, 380, 379, 381, 385, 462, 472; 902/27, 30, 32, 35<br>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched<br>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)<br>Please See Extra Sheet.   |  |  |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>  |  |  |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| Category*  | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No.  |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| Y  | US 5,459,306 A (STEIN ET AL) 17 October 1995 (17/10/95), see entire document       | 1-18   |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| Y  | US 5,457,305 A (AKEL ET AL) 10 October 1995 (10/10/95), see entire document        | 1-18   |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| Y  | US 5,422,809 A (GRIFFIN ET AL) 06 June 1995 (06/06/95), see entire document        | 1-18   |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| Y  | US 4,982,346 A (GIROUARD ET AL) 01 January 1991 (01/01/91), see entire document    | 1-18   |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| Y  | US 4,803,348 A (LOHREY ET AL) 07 February 1989 (07/02/89), see entire document     | 1-18   |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| Y,P  | US 5,711,231 A (COUVRETTE ET AL) 27 January 1998 (27/01/98), see entire document   | 1-18   |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.   |  |  |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| <table border="0"> <tr> <td>* Special categories of cited documents:</td> <td>T</td> <td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>*A* document defining the general state of the art which is not considered to be of particular relevance</td> <td>X</td> <td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>*E* earlier document published on or after the international filing date</td> <td>Y</td> <td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>g</td> <td>document member of the same patent family</td> </tr> <tr> <td>*O* document referring to an oral disclosure, use, exhibition or other means</td> <td></td> <td></td> </tr> <tr> <td>*P* document published prior to the international filing date but later than the priority date claimed</td> <td></td> <td></td> </tr> </table> |  |  | * Special categories of cited documents: | T | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention | *A* document defining the general state of the art which is not considered to be of particular relevance | X | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone | *E* earlier document published on or after the international filing date | Y | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art | *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | g | document member of the same patent family | *O* document referring to an oral disclosure, use, exhibition or other means |  |  | *P* document published prior to the international filing date but later than the priority date claimed |  |  |
| * Special categories of cited documents:   | T  | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| *A* document defining the general state of the art which is not considered to be of particular relevance   | X  | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone   |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| *E* earlier document published on or after the international filing date   | Y  | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  | g  | document member of the same patent family  |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| *O* document referring to an oral disclosure, use, exhibition or other means   |  |  |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| *P* document published prior to the international filing date but later than the priority date claimed   |  |  |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| Date of the actual completion of the international search<br>13 JULY 1998  |  | Date of mailing of the international search report<br>27 OCT 1998  |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |
| Name and mailing address of the ISA/US<br>Commissioner of Patents and Trademarks<br>Box PCT<br>Washington, D.C. 20231<br>Facsimile No. (703) 305-3230  |  | Authorized officer<br>MICHAEL G. LEE<br>Telephone No. (703) 308-4884   |  |   |   |  |   |  |  |   |  |   |   |   |  |  |  |  |  |  |



**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US98/12364

**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Y,P       | US 5,708,782 A (LARSON ET AL) 13 January 1998 (13/01/98),<br>see entire document   | 1-18                  |
| Y,P       | US 5,600,114 A (DUNLAP ET AL) 04 February 1997<br>(04/02/97), see entire document  | 1-18                  |

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US98/12364

## B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

### APS

search terms: kiosk, touchscreen and (computer or processor or cpu) and printer and scanner, (magnetic stripe reader or credit card reader), (cd or compact disc), hard drive, speaker, (keypad or keyboard), communicat?, (wan or wide area network), (lan or local area network), internet, satellite, shelf, remote(lw)(server or system), host system, coupon, program